REMARKS

Initially, Applicant notes that remarks and amendments made by this paper are consistent with the proposals presented to the Examiner during the telephone call placed on April 24, 2007.

The Non-final Office Action, mailed February 20, 2007, considered and rejected claims 1-28. Claims 1-28 were rejected under 35 U.S.C. 102(e) as being anticipated by either Ishibashi (US 6694440) hereinafter Ishibashi or Kobayashi (US 7058825) hereinafter Kobayashi.[1] Claims 1-28 were also rejected under 35 U.S.C. § 101 for purportedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

By this amendment, claims 1-7 and 23-26 have been amended while claims 27 and 28 have been cancelled such claims 1-28 now remain pending and, of which, claims 1, 23, and 24 are the only independent claims at issue. Support for the amendments is found throughout the Specification, including, but not limited to, the disclosure found within ¶¶ [0009], [0010], [0018] and [0033]. Many of the claim amendments are also supported by the claims previously filed and recite, in explicit terms, some of the limitations that were already inherently present in the claims.

Initially, with regard to the §101 rejections, Applicant notes that claims 1 and 23 have been amended to replace the term "network connectable", which was found to be vague and indefinite, with the more definite term "communicatively coupled".

It will also be noted that independent claim 24 has been amended to clarify that the computer-readable media comprises a computer-readable storage media for performing the method of independent claim 1. In view of these amendments, Applicant respectfully submits that all of the §101 rejections are now moot.

Now, with regard to the substantive rejections, it will be noted that the present invention is generally directed to embodiments for waking a link layer based on data contained in a network data packet. For instance, claim 1 recites a method for waking a link layer at a receiving computer system. The method includes the acts of a physical layer receiving a network data

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[1] Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

packet from a sending computer system, the physical layer parsing a plurality of bytes of packet data contained in the received network data packet, comparing at least a portion of the packet data to rule data in a physical layer rule register, and determining if the physical layer is to assert a Link On signal (for the link layer) based on the results of the comparison, as well as a determination that the link layer is in a reduced power mode.

All of the pending independent claims were rejected as being anticipated by Ishibashi or Kobayashi. Ishbashi discloses a personal computer that is connected to a 1394/LAN bridge adapter via a 1394 bus and is connected to a LAN via the 1394 bus and the 1394/LAN bridge adapter. In Ishibashi, the 1394/LAN bridge adapter converts a remote activation packet received from the LAN to a Link-on packet in the 1394 network. Additionally, the bridge adapter detects whether the remote activation packet is a magic packet with a predetermined bit pattern or a specific bit pattern associated with a predetermined bit pattern. Kobayashi discloses a power supply method of supplying electric power to a partner apparatus. In Kobayashi, a power supply delivers a link-on packet to a power consuming device and the power supply then authenticates the identity of the power consuming device to determine if power should be maintained.

The embodiments disclosed in Ishibashi and Kobayashi are clearly distinguished from the claimed embodiments for at least the reason presented in this response, as well as for the reasons mentioned over the phone. Among other things, the cited art clearly fails to disclose or suggest any embodiment wherein a physical layer receives a network data packet from a sending computer system that contains data that is compared to a set of rules to determine whether a Link On signal should be output, this is particularly true when considering that the determination is also based on an additional determination that the link layer is in a reduced power mode. The claims have been amended to further emphasize some of these distinctions between the pending claims and the cited art.

In Ishibashi, a 1394/LAN bridge adapter converts a typical wake packet sent by the LAN to a Link-on packet used in the 1394 network. The determination of the 1394/LAN bridge adapter to send a Link-on packet over the 1394 network is not based on a data packet or any data included in the network packet as required in the presently presented claims. It is also not based on a determination that a link layer is in a reduced power mode. Instead, the 1394/LAN bridge adapter is responding to a request to wake up the device based upon a received wake packet and is merely passing along the request after converting it to compatible format. This can be

contrasted with the currently claimed embodiments where the physical layer sends a Link On signal to the link layer based on the actual data contained in the data packet such as a transaction code and based on determining the link layer is in a reduced power mode. There is no need for the physical layer to explicitly receive a wake packet; the physical layer will be able to wake the link layer whenever the physical layers determines that the contents of a data packet require the link layer to be activated.

Similar to Ishibashi, Kobayashi also fails to disclose or suggest the comparison of data within a data packet, as well as determining the link layer is in a reduced power mode, in order to wake the link layer. Instead, Kobayashi clearly discloses the use of a Link-on packet to wake the link layer in response to receiving a self-ID packet. Kobayashi does not teach waking the link layer based on the data contents of any packet, or based upon the determination that the link layer is in a reduced power mode. Furthermore, it will be noted that Kobayashi's disclosed act of 'authenticating' does not correspond to the recited act of 'comparing' in the currently claimed invention because, in Kobayashi, the authentication takes place after the link layer has already been awoken. The authentication of Kobayashi is only used to determine if the power should be maintained, not whether the initial wake command should be sent.

The remaining independent claims, 23 and 24, recite a method similar to that of independent claim 1. Claim 23 recites a method using functional 'step for' language in place of some of the acts recited in claim 1. Claim 24 recites a computer program product that implements the acts of claim 1. Because the independent claims recite limitations substantially similar to independent claim 1, the reasoning used to distinguish claim 1 is applicable to remaining independent claims.

Although only the distinctions in independent claims 1, 23, and 24 were addressed, since each of the dependent claims depends on one of these independent claims, each of the dependent claims also are patentable over the cited art. In view of the foregoing, Applicant respectfully submits that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice.[2] In

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[2] Instead, Applicant reserves the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has

fact, it will actually be noted that the dependent claims were summarily and erroneously dismissed, without being addressed in their entirety.

With specific regard to the dependent claims, Applicant notes that the cited art also fails to teach or suggest the specific limitations found in the dependent claims, including, but not limited to the embodiments in which a transaction code (claim 6) or an address offset (claim 7) is parsed from the data packet to make the determination for instantiating the Link On signal or wherein a bit mask is applied to parsed packet data to make the determination (claims 10-12), for example.

For at least the foregoing reasons, Applicant respectfully submits that the pending claims are in condition for immediate allowance. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 18th day of May, 2007.

Respectfully submitted,

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relied on any Official Notice, explicitly or implicitly, Applicant specifically requests that the Examiner provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.